Skyworks MMIC Powers World's Smallest Camera Flip Phone

Skyworks Solutions, Inc., announced that its ultra-compact MMIC power amplifiers are supporting Cingular's triband GSM/GPRS Pantech C300 multimedia messaging handset – the world's smallest camera flip phone available today which weighs in at just 2.5 ounces – one-third the size of a US dollar bill.

Available through Cingular GoPhone, the Pantech C300 features bright, large font color screens, a VGA camera with flash and zoom in LCD mode, multimedia messaging for photos, text and sound, customizable real MP3, MIDI and i-Melody music ringtones, Yahoo! mobile instant messaging, high-speed data transmission availability using GPRS, 10MB of usable memory for storage and e-mail – specifications typically included in a handset at least twice its size.

"Skyworks is delighted to be delivering technology that is enabling Pantech to offer Cingular and ultimately consumers breakthrough cellular handset designs such as the revolutionary C300," said Brian M. Daly, vice president of marketing for Mobile Platforms at Skyworks. "Our power amplifiers provide the required functionality and exceptionally small form factor for designing compelling ultra-thin phones that appeal to consumers of all ages around the world."

Given that more digital cameras are sold as part of cellular phones versus on a standalone basis, handset manufacturers are increasingly focused on form factor, battery life and system cost to be able to accommodate such multimedia features. As such, Skyworks' suite of PAs and front-end modules (FEMs) are tailored to support extremely compact, power-efficient and low-cost applications.

Skyworks also recently launched a new family of general purpose GaAs attenuators have the requisite distortion performance for various types of linear applications including UMTS, WCDMA, WiMAX and WLAN.

Web www.skyworksinc.com

First GaN-on-Diamond Transistor

EMCORE Corporation announced that a team including EMCORE, Group4 Labs and Engineers at the US Air Force Research Labs (AFRL) have demonstrated the world's first successful fabrication of operational GaN-on-Diamond HEMT device. AlGaN/GaN epitaxial transistor layers were grown by MOCVD at EMCORE and atomically attached to CVD diamond substrate by Group4 Labs. The AFRL team fabricated the transistors.

This achievement highlights the feasibility of producing GaN-based RF devices closely thermally coupled to diamond substrates to maximize heat extraction from these devices. The team expects this technology to improve power density and efficiency of devices operating at high frequencies due to higher packing density and better heat dissipation in the immediate vicinity of the active device area. This novel process has a wide-range of possible applications, including high performance GaN-based RF devices, HBLEDs and laser diodes. This work was supported in part by a DARPA-funded Cooperative Agreement between EMCORE and AFRL.

"We are excited by the promise of this technology combining the most robust semiconductor material with the best heat spreader," commented Dr. Ivan Eliashevich, Director of R&D at Emcore Corporation's EMD division. "Epitaxial wafers based on a GaN-on-Diamond platform should enable device manufacturers to push the limits of high-power performance and reliability across a wide range of applications."

Web: www.emcore.com

Richardson in Latin America

Global distributor and provider of RF & wireless solutions, Richardson Electronics announced an expansion of its relationship with Radiotronix, Inc. to distribute its embedded module products to all countries in Latin America.

Richardson's Latin America organizational infrastructure includes local warehouses and currency abilities, as well as technical field sales engineers with RF pedigrees.